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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/827,096	04/06/2001	Hiroyuki Miyake	205501US2	2300
22850	7590	11/23/2005	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			JONES, HEATHER R	
			ART UNIT	PAPER NUMBER
			2616	

DATE MAILED: 11/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/827,096

Applicant(s)

MIYAKE, HIROYUKI

Examiner

Heather R. Jones

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 and 19-26 is/are pending in the application.
- 4a) Of the above claim(s) 3-8 and 21-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 19 and 20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 April 2001 and 22 August 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed August 22, 2005 have been fully considered but they are not persuasive.

The Applicant argues on Page 9, lines 16-18 and Page 10, line 17 – Page 11, line 14 that the Matsumoto et al. reference does not disclose an optical element that is in contact with an upper surface of an imaging element because one of ordinary skill in the art would not define the word “contact” to mean “the state of being in communication”. The Examiner respectfully disagrees. One of ordinary skill in the art would interpret the word “contact” to mean in communication with as can be seen in U.S. Patent 4,870,496 by Fantone. Fantone discloses in col. 3, lines 21-23 that the incoming light travels an optical path through lens and “contacts” charge coupled device (CCD) array. Therefore, the lens are in contact with the CCD array, which supports the Examiner's definition of the word “contact” in the rejection of claim 1.

### ***Election/Restrictions***

2. Claims 21-26 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on January 3, 2005.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Matsumoto et al. (U.S. Patent 5,040,069).

Regarding claim 1, Matsumoto et al. discloses in Fig. 7 an imaging device including integrally an imaging element (104) to be mounted on a substrate (103) and an optical element having an imaging lens section for providing a light-receiving surface (can be seen from Fig. 7) of the imaging element (104) with optical information, wherein the substrate (103) has an opening section; the imaging element (104) is fastened on the substrate (103) so as to close the opening section with a surface including the light-receiving surface; and the optical element is arranged so as to come into contact (into communication) with the upper surface of the imaging element (104) by way of the opening section (the light goes through the lens and then through the opening in the substrate in order to contact the imaging element) (col. 5, line 37- col. 6, line 5).

Regarding claim 2, Matsumoto et al. discloses all the limitations as previously discussed with respect to claim 1 including that the connection means for establishing electrical connection between the substrate (103) and the imaging element (104) is provided in an overlap between the substrate (103) and

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the imaging element (104); and the optical element is in contact (in communication) with areas on the upper surface of the imaging element other than the light-receiving surface (the light goes through the lens and then through the opening in the substrate in order to contact the imaging element) (col. 5, line 37 – col. 6, line 5).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto et al. (U.S. Patent 5,040,069) in view of Ueda (U.S. Patent 6,122,009).

Regarding claim 19, Matsumoto et al. discloses in Fig. 7 an imaging device comprising a substrate (103) having an opening section; an imaging element (104) mounted on the substrate (103), the imaging element having a light receiving surface (can be seen from Fig. 7); and an optical element having an imaging lens section, wherein the imaging element (104) is fastened on the substrate (103) so as to close the opening section with a surface including the light-receiving surface. However, Matsumoto et al. fails to disclose the optical element being mounted on an upper surface of the imaging element by way of the opening section.

Referring to the Ueda reference, Ueda discloses an imaging device comprising an optical element (10) mounted on an upper surface of the imaging element (CCD) (12) (Fig. 6).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to mounted the optical element directly onto the imaging element as taught by Ueda in the imaging device disclosed by Matsumoto et al. in order to reduce the size and weight of the imaging device as taught by Ueda (col. 1, lines 10-21). Furthermore, in order for the optical element to be mounted on an upper surface of the imaging element in the Matsumoto et al. imaging device the optical element would have to be mounted on the imaging element by way of the opening section.

Regarding claim **20**, Matsumoto et al. in view of Ueda discloses all the limitations as previously discussed with respect to claim 1 including that the connection means for establishing electrical connection between the substrate (103) and the imaging element (104) is provided in an overlap between the substrate (103) and the imaging element (104); and the optical element is in contact (in communication) with areas on the upper surface of the imaging element other than the light-receiving surface (the light goes through the lens and then through the opening in the substrate in order to contact the imaging element) (Matsumoto et al.: col. 5, line 37 – col. 6, line 5).

***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Heather R. Jones whose telephone number is 571-272-7368. The examiner can normally be reached on Mon.-Thurs.: 7:00 am - 4:30 pm, and every other Fri.: 7:00 am - 3:30 pm.

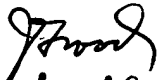
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Groody can be reached on 571-272-7950. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Heather R Jones  
Examiner  
Art Unit 2616

HRJ  
November 10, 2005

  
**James J. Groody**  
**Supervisory Patent Examiner**  
**Art Unit 262 2616**